

CHANGE NO. 2

HEADQUARTERS
DEPARTMENT OF THE ARMY
DEPARTMENT OF THE AIR FORCE
Washington, DC, 29 April 1992

AIRDROP OF SUPPLIES AND EQUIPMENT RIGGING TILT TRAILERS

This change adds the procedures for rigging the 15-ton tilt bed trailer on a type V platform for low-velocity and LAPE airdrops.

FM 10-540/TO 13C7-3-381, 17 November 1978, is changed as follows:

- 1. New or changed material is identified by a vertical bar in the margin opposite the changed material.
- 2. Remove old pages and insert new pages as indicated below:

Remove old pages	Insert new pages
i through iii	i through iv
1-1	1-1
	5-1 through 5-49
	Glossary-1
A-1	References-1

3. File this transmittal sheet in front of the publication for reference purposes.

DISTRIBUTION RESTRICTION: Distribution authorized to US government agencies only to protect technical or operational information from automatic dissemination under the International Exchange Program or by other means. This determination was made on 30 April 1991. Other requests for this document will be referred to Commander, US Army Quartermaster Center and School, ATTN: ATSM-DTL, Fort Lee, VA 23801-5036.

DESTRUCTION NOTICE: Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

By Order of the Secretaries of the Army and the Air Force:

Official:

Milto H. Azuello MILTON H. HAMILTON Administrative Assistant to the Secretary of the Army GORDON R. SULLIVAN General, United States Army Chief of Staff

DISTRIBUTION:

Active Army, USAR, and ARNG: To be distributed in accordance with DA Form 12-11-E, requirements for FM 10-540, Airdrop of Supplies and Equipment: Rigging Tilt Trailers (Qty rqr block no 0922).

FIELD MANUAL NO 10-540 TECHNICAL ORDER NO 13C7-3-381 HEADQUARTERS
DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
Washington, DC, 17 November 1978

AIRDROP OF SUPPLIES AND EQUIPMENT RIGGING TILT TRAILERS

TABLE OF CONTENTS

	Paragraph	Page
PREFACE		iv
	Scope	iv
CHAPTER 1	INTRODUCTION Description of Items	1-1 1-1
CHAPTER 2	RIGGING 6-TON TRAILER Description of Load 2-1 Preparing Platform 2-3 Building and Placing Honeycomb 2-4 Preparing Trailer 2-4 Positioning Trailer 2-5 Lashing Trailer 2-6 Stowing Accompanying Load 2-7 Installing Extraction System 2-8 Placing Extraction Parachutes 2-9 Marking Rigged Load 2-10 Equipment Required 2-11	2-1 2-1 2-1 2-1 2-1 2-1 2-1 2-1 2-1
CHAPTER 3	RIGGING 12-TON TRAILER Description of Load 3-1 Preparing Platform 3-2 Building and Placing Honeycomb 3-3 Preparing Trailer 3-4 Positioning Trailer 3-5 Lashing Trailer 3-6 Installing Extraction System 3-7 Placing Extraction Parachutes 3-8 Marking Rigged Load 3-9 Equipment Required 3-10	3-1 3-1 3-1 3-1 3-1 3-1 3-1 3-1

DISTRIBUTION RESTRICTION: Distribution authorized to US government agencies only to protect technical or operational information from automatic dissemination under the International Exchange Program or by other means. This determination was made on 30 April 1991. Other requests for this document will be referred to Commander, US Army Quartermaster Center and School, ATTN: ATSM-DTL, Fort Lee, VA 23801-5036.

DESTRUCTION NOTICE: Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

C2, FM 10-540/TO 13C7-3-381

	Paragraph	Page
CHAPTER 4	RIGGING 15-TON TRAILER	
Section I	RIGGING 15-TON TRAILER FOR	
	LOW-VELOCITY AIRDROP	
	Description of Load4-1	4-1
	Preparing Platform 4-2	4-1
	Building and Placing Honeycomb4-3	4-1
	Modifying Trailer 4-4	4-5
	Preparing Trailer4-5	4-5
	Installing Suspension Slings 4-6	4-7
	Positioning Trailer	4-9
	Lashing Trailer	4-10
	Safetying Suspension Slings 4-9	4-11
	Stowing Cargo Parachutes	4-12
	Installing Extraction System 4-11	4-14
	Installing Parachute Release System 4-12	4-14
	Positioning Extraction Parachute	4-16
	Marking Rigged Load4-14	4-16
	Equipment Required4-15	4-16
Section II	RIGGING 15-TON TRAILER FOR LAPE AIRDROP	
Section 11	Description of Load	4-19
	Preparing Platform	4-19
	Building and Placing Honeycomb	4-19
	Preparing Trailer	4-1 9 4-22
	Positioning Trailer	4-22 4-22
	Lashing Trailer	4-22 4-23
	Installing Extraction System 4-22	4-25 4-26
	Placing Extraction Parachutes	4-26 4-28
	Marking Rigged Load	4-28 4-28
	Equipment Required	4-28 4-28
CHAPTER 5	RIGGING 15-TON TILT BED TRAILER ON	
CHAI IEIC O	A TYPE V PLATFORM	
Section I	LOW-VELOCITY AIRDROP	
	Description of Load 5-1	5-1
	Preparing Platform 5-2	5-1
	Building and Positioning Honeycomb Stacks 5-3	5-3
	Preparing Trailer 5-4	5-9
	Installing Lifting Slings5-5	5-15
	Positioning Trailer	5-16
	Lashing Trailer	5-17
	Installing and Safetying Suspension Slings	5-20
	Building and Installing Parachute Stowage Platform 5-9	5-21
	Stowing and Securing Cargo Parachutes5-10	5-24
	Installing Parachute Release	5-25
	Preparing and Installing Extraction System5-12	5-26
	Installing Provisions for Emergency Restraints	5-28
	Placing Extraction Parachute	5-28
	Marking Rigged Load5-15	5-28
	Equipment Required5-16	5-29

C2, FM 10-540/TO 13C7-3-381

		Paragraph	Page
Section II	LAPE AIRDROP		1
Bection ii	Description of Load	5-17	5-31
	Preparing Platform	5-18	5-31
	Building and Positioning Honeycomb Stacks	5-19	5-32
	Preparing Trailer	5-20	5-38
	Installing Lifting Slings	5-21	5-39
	Positioning Trailer	5-22	5-39
	Lashing Trailer	5-23	5-40
	Installing Extraction System	5-24	5-43
	Placing Extraction Parachute	5-25	5-46
	Marking Rigged Load	5-26	5-46
	Equipment Required	5-27	5-48
			1
GLOSSARY		Glo	ssary-1
	8		

PREFACE

SCOPE

This manual tells and shows how to prepare and rig the tilt trailers with or without an accompanying load for low-velocity airdrop from the C-130 and C-141 aircraft and for delivery by LAPE from the C-130 aircraft.

USER INFORMATION

The proponent of this publication is HQ TRADOC. You are encouraged to report any errors or omissions and to suggest ways for making this a better manual. Army personnel, send your comments on DA Form 2028 directly to:

Commander
US Army Quartermaster Center and School
ATTN: ATSM-DTL
Fort Lee, Virginia 23801-5036

Air Force personnel, send you reports on AFTO Form 22 through:

Headquarters
Military Airlift Command
(MAC/XOTT)
Scott AFB, Illinois 62225-5001

to:

Command
US Army Quartermaster Center and School
ATTN: ATSM-DTL
Fort Lee, Virginia, 23801-5036

Also send information copies of AFTO Form 22 to:

San Antonio ALC/LDILT Kelly AFB, Texas 78241-5000

CHAPTER 1 INTRODUCTION

1-1. Description of Items

The tilt trailers rigged in this manual are the 6-ton trailers, the 12-ton trailers, the 15-ton trailers, and the 15-ton tilt bed trailer.

1-2. Special Considerations

CAUTION: Only ammunition listed in FM 10-553/TO 13C7-18-41 may be airdropped.

a. These loads may include a hazardous material as defined by AFR 71-4/TM 38-250. When included, the hazardous material must be packaged, marked, and labeled according to AFR 71-4/TM 38-250.

b. A copy of this manual must be made available to the joint inspectors during the before- and afterloading inspections.

CHAPTER 5 RIGGING 15-TON TILT BED TRAILER ON A TYPE V PLATFORM

Section I LOW-VELOCITY AIRDROP

5-1. Description of Load

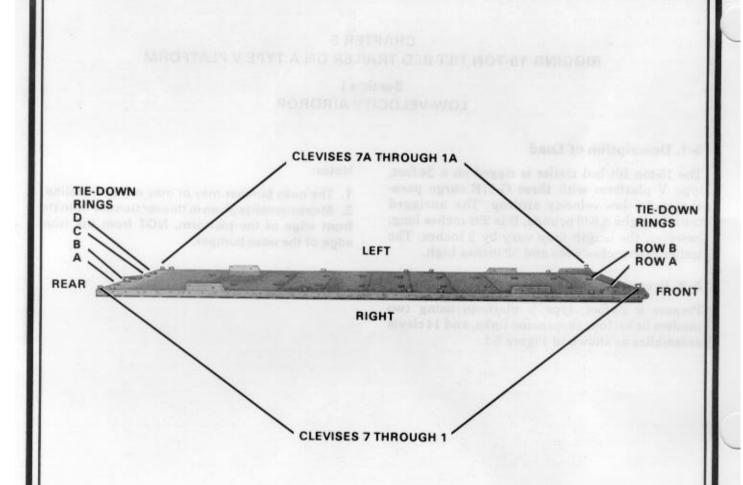
The 15-ton tilt bed trailer is rigged on a 24-foot, type V platform with three G-11B cargo parachutes for low-velocity airdrop. The unrigged trailer weighs 8,630 pounds. It is 292 inches long; however, the length may vary by 2 inches. The trailer is 96 inches wide and 52 inches high.

5-2. Preparing Platform

Prepare a 24-foot, type V platform using two tandem links, four suspension links, and 14 clevis assemblies as shown in Figure 5-1.

Notes:

- 1. The nose bumper may or may not be installed.
- 2. Measurements given in this section are from the front edge of the platform, NOT from the front edge of the nose bumper.

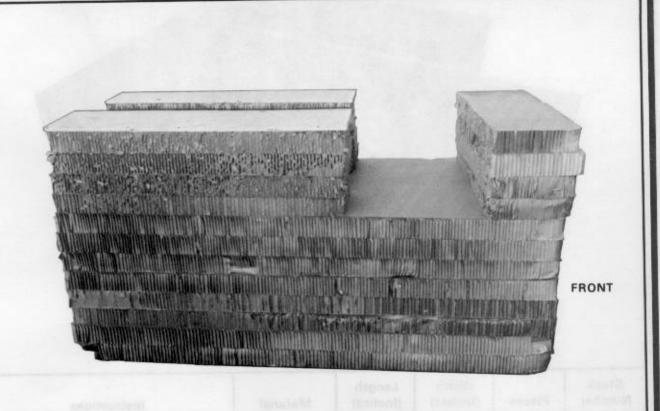


Step:

- Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-268-20&P/ TO 13C7-52-22.
- 2. Install a suspension link on each platform side rail using bushings 9, 10, and 11.
- Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
- 4. Install a suspension link on each platform side rail using bushings 38, 39, and 40.
- Install a clevis on bushing 1 on each tandem link.
- Starting at the front of each platform side rail, install clevises on each platform side rail using the bushings bolted on holes 5, 18, 21, 30, 47, and 48.
- Starting at the front of the platform, number the clevises bolted to the right side from 1 through 7 and those bolted to the left side from 1A through 7A.
- Starting at the front of the platform, label the two tie-down rings in the first 11 panels A and B from right to left. Label the four tie-down rings in the last panel A, B, C, and D from right to left. Starting with the first panel, number the tie-down rings 1 through 12.

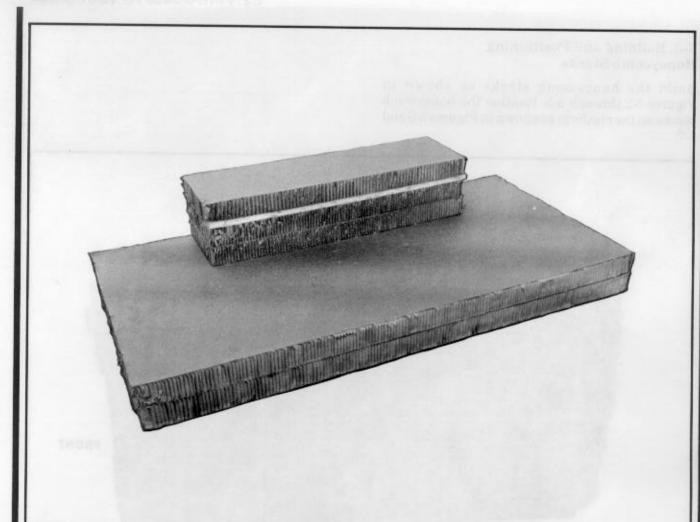
5-3. Building and Positioning Honeycomb Stacks

Build the honeycomb stacks as shown in Figures 5-2 through 5-5. Position the honeycomb stacks on the platform as shown in Figures 5-6 and 5-7.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
bridge s	8	36	72	Honeycomb	Form base.
	4	36	12	Honeycomb	Place honeycomb on top of the base flush with the front edge of the base.
	8	12	42	Honeycomb	Form two stacks of four layers each. Place one stack on the right rear and the other stack on the left rear flush with the rear edge of the base.
	2	12	42	3/4-inch plywood	Place one piece of plywood on top of each stack of 12- by 42-inch honeycomb.

Figure 5-2. Honeycomb stack 1 prepared



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
2	2	36	72	Honeycomb	Form base.
	3	12	42	Honeycomb	Center honeycomb on top of the base flush with the left edge of the base stack.
and	1 gor no dm	12	42	3/4-inch plywood	Place plywood between the second and third 12- by 42-inch piece of honeycomb.
3	2	36	72	Honeycomb	Form base.
	3	12	42	Honeycomb	Center honeycomb on top of the base flush with the right edge of the base stack.
del top of	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12	42	3/4-inch plywood	Place plywood between the second and third 12- by 42-inch piece of honeycomb.

Figure 5-3. Honeycomb stacks 2 and 3 prepared



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
4	5	36	48	Honeycomb	Form base.
	8 anothbum	12	48	Honeycomb	Form two stacks of four layers each. Place one stack on the right side and the other stack on the left side flush with the side edge of the base stack.
	2	12	48	3/4-inch plywood	Place one piece of plywood on top of each stack of 12- by 48-inch honeycomb.

Figure 5-4. Honeycomb stack 4 prepared

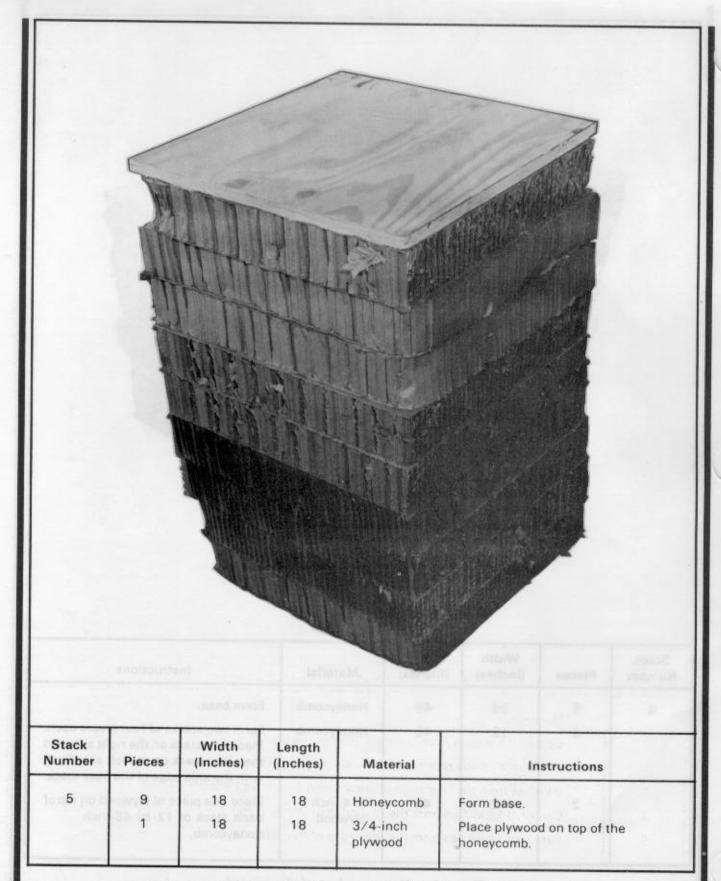


Figure 5-5. Honeycomb stack 5 prepared

Notes: 1. This drawing is not drawn to scale. 2. Dimensions are given in inches. 11" STACK 3 8′′ 18" STACK 5 STACK 1 STACK 4 14"

18"

STACK 2

RIGHT

8"

11"

Stack Number	Position of Stack on Platform	
	Place stack:	
1	Centered 6 inches from the front edge of the platform.	
2	8 inches from the rear edge of stack 1 and 11 inches from the right rail.	
3	8 inches from the rear edge of stack 1 and 11 inches from the left rail.	
4	Centered 18 inches from the rear edge of stacks 2 and 3.	
5	Centered 14 inches from the rear edge of the platform.	

Figure 5-6. Overhead view of honeycomb stacks positioned on platform

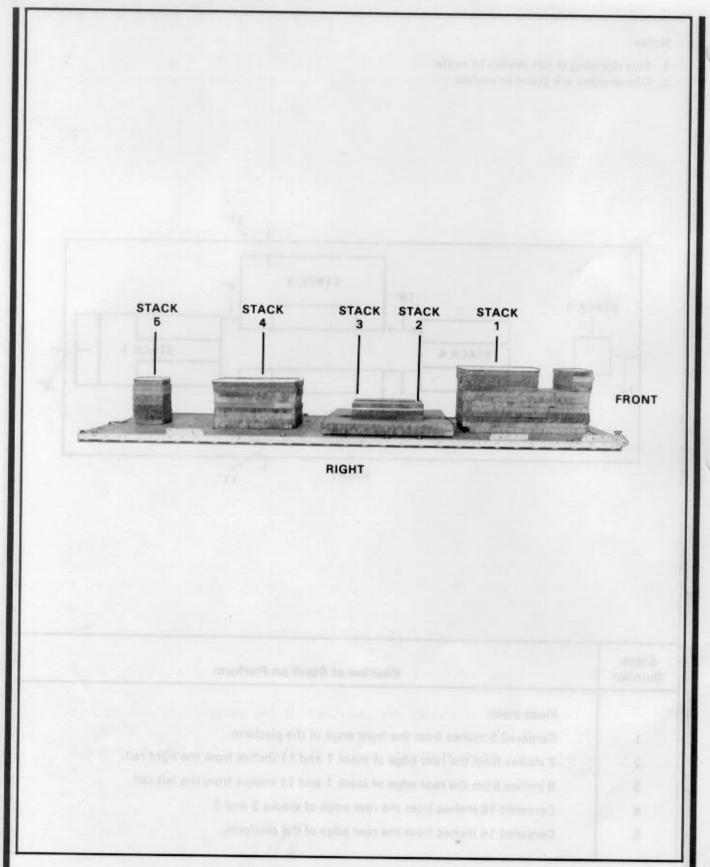
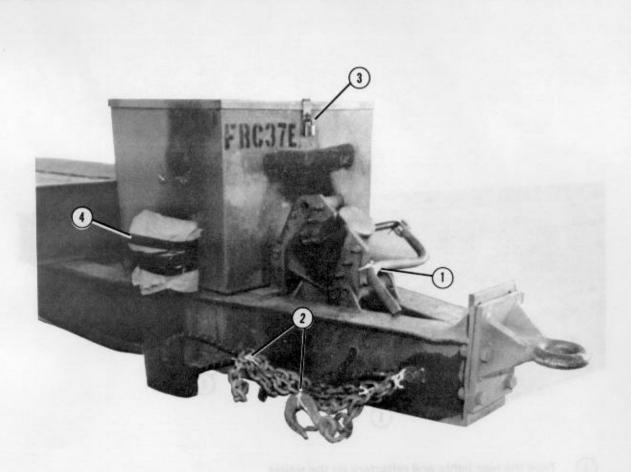


Figure 5-7. Side view of honeycomb stacks positioned on platform

5-4. Preparing Trailer

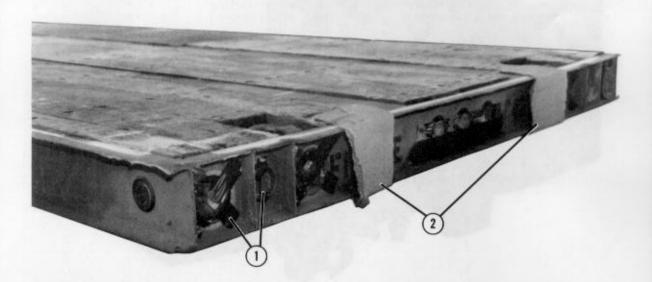
Remove the spare tire from its bracket. Prepare the trailer as shown in Figures 5-8 through 5-13.



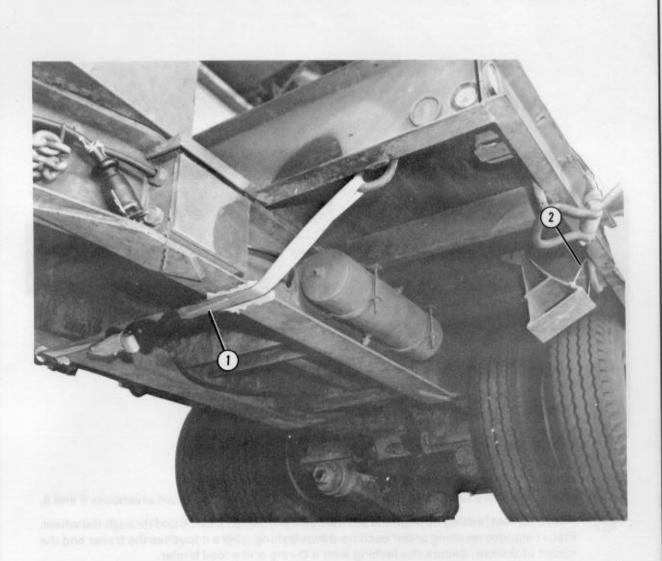
Note: Place a support device under the front of the trailer before raising the front landing gear.

- Raise the front landing gear. Tie the landing gear handle in the stowed position using type III nylon cord.
- Fold the air hoses, cables, and chains along the drawbar. Tie them in place with type III nylon cord.
- Fill the toolbox with scrap honeycomb. Close the toolbox lid, and secure the lid with a lock or type III nylon cord.
- Wrap the spare tire wheel stowage bracket with cellulose wadding. Tape the wadding in place.

Figure 5-8. Trailer components secured



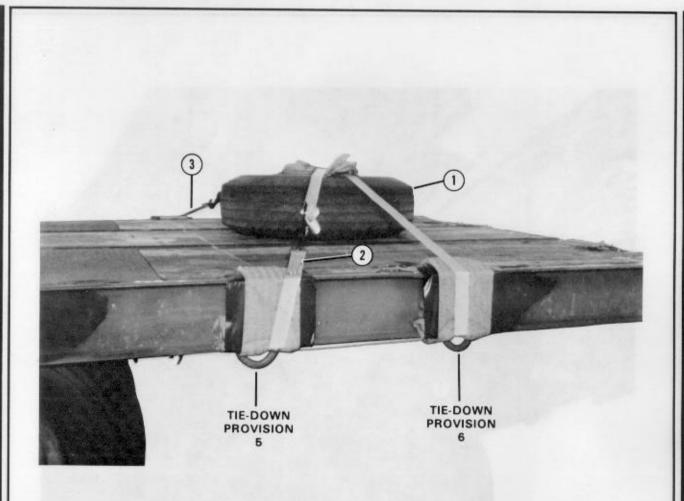
- 1 Tape the rear lights and reflectors on the trailer.
- Tape cellulose wadding to the rear bumper as shown.



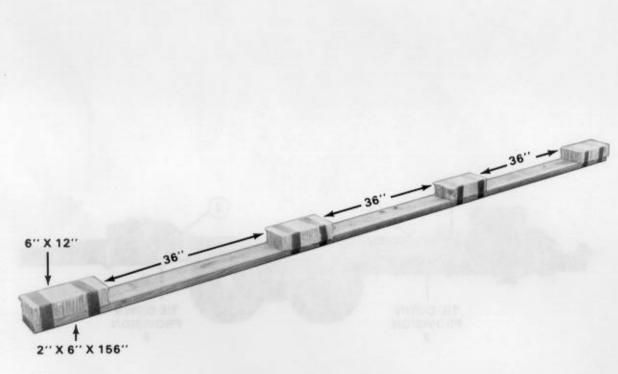
- Pass a 15-foot lashing through the left front tie-down provision, under the drawbar, and through the right front tie-down provision. Secure it with a D-ring and a load binder.
- Tie the chocks in place with type III nylon cord.

Note: Pad all sharp areas of the trailer where contact is made with the lashings.

Figure 5-10. Trailer bed and chocks secured



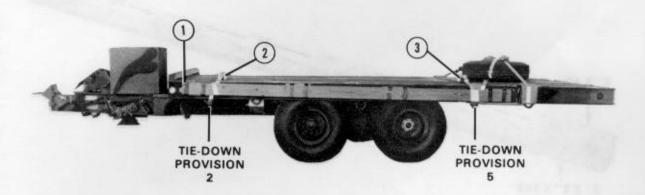
- Center the spare tire on the rear of the trailer deck between tie-down provisions 5 and 6.
- Pass a 15-foot lashing through the left tie-down provisions 5 and 6 and through the wheel. Place cellulose wadding under each tie-down lashing where it touches the trailer and the center of the tire. Secure the lashing with a D-ring and a load binder.
- 3 Repeat step 2 for the right side of the trailer.



Step:

Note: Dimensions are given in inches.

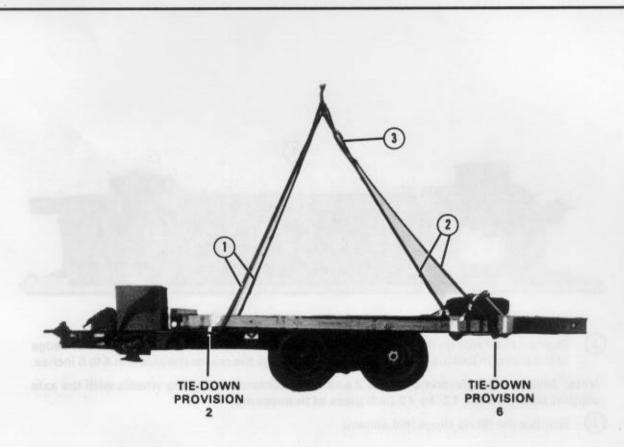
- Cut one 2- by 6- by 156-inch piece of lumber.
- Cut four 6- by 12-inch pieces of honeycomb. Position the first piece of 6- by 12-inch honeycomb on top of the 2- by 6- by 156-inch piece of lumber flush with the front edge of the lumber.
- Position the second 6- by 12-inch piece of honeycomb on top of the lumber 36 inches from the rear edge of the first piece of honeycomb.
- Position the third 6- by 12-inch piece of honeycomb on top of the lumber 36 inches from the rear edge of the second piece of honeycomb.
- Position the fourth 6- by 12-inch piece of honeycomb on top of the lumber flush with its rear edge.
- 6. Tape each piece of honeycomb to the lumber in two places.
- Repeat steps 1 through 6 to prepare the second body protection board.



- 1 Position a body protection board 8 inches from the front edge of the trailer on each side.
- Pass a 15-foot lashing through tie-down provision 2 and through its own D-ring. Repeat the same procedure for the other side of the trailer. Attach D-rings to the lashings, and secure them with a load binder.
- Repeat step 2 using tie-down provision 5.

5-5. Installing Lifting Slings

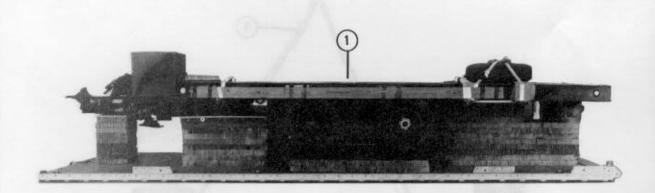
Install lifting slings as shown in Figure 5-14. Use four 12-foot (2-loop), type XXVI nylon webbing slings; one 3-foot (2-loop), type XXVI nylon webbing sling; a type IV link assembly; and four large suspension clevises to lift the trailer.



- 1 Attach a 12-foot sling to tie-down provision 2 on each side of the trailer using a large suspension clevis.
- Attach a 12-foot sling to tie-down provision 6 on each side of the trailer using a large suspension clevis.
- Pass a 3-foot sling through the end loops of the slings installed in step 2. Join the ends of the 3-foot sling with a type IV link assembly.

5-6. Positioning Trailer

Position the trailer on the honeycomb stacks as shown in Figure 5-15.



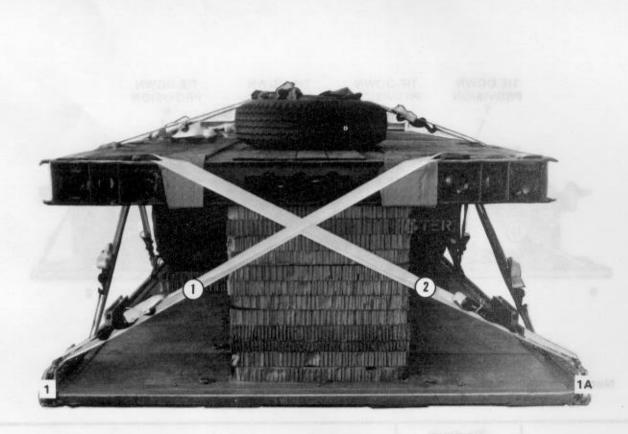
Position the trailer on the platform so that the rear of the trailer is flush with the front edge of the platform and the front of the trailer overhangs the rear of the platform 4 to 6 inches.

Note: Make sure honeycomb stacks 2 and 3 are centered under the wheels with the axle support sitting on the 12- by 42-inch piece of honeycomb.

Remove the lifting slings (not shown).

5-7. Lashing Trailer

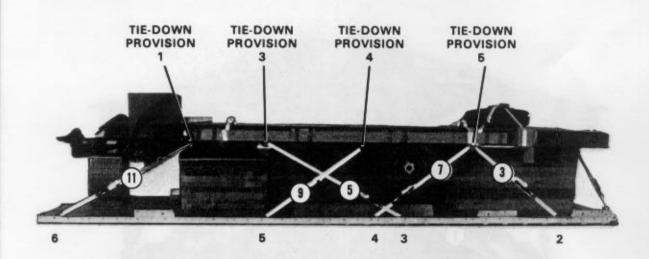
Lash the trailer to the platform according to FM 10-500-2/TO 13C7-1-5 and as shown in Figures 5-16, 5-17, and 5-18 using fourteen 15-foot tie-down assemblies.



Note: Left and right refer to the vehicle, NOT the platform.

Lashing Number	Tie-down Clevis Number	Instructions	4 10 10
	8 notaivong nyrob-el	flet ent riguezh E	-
	tle-down provision	Pass lashing:	
1	le-down provisient A de-down provision I	Through the right top lifting provision at the rear of the trailer.	
2	1A	Through the left top lifting provision at the rear of the trailer.	

Figure 5-16. Lashings 1 and 2 installed



Note: Left and right refer to the trailer, NOT the platform.

Lashing Number	Tie-down Clevis Number	Instructions
		Pass lashing:
3	2	Through the left tie-down provision 5.
4	2A	Through the right tie-down provision 5.
5	3	Through the left tie-down provision 3.
6	3A	Through the right tie-down provision 3.
7	4	Through the left tie-down provision 5.
8	4A	Through the right tie-down provision 5.
9	5	Through the left tie-down provision 4.
10	5A	Through the right tie-down provision 4.
11	6	Through the left tie-down provision 1.
12	6A	Through the right tie-down provision 1.
		THE STATE OF THE S

Figure 5-17. Lashings 3 through 12 installed

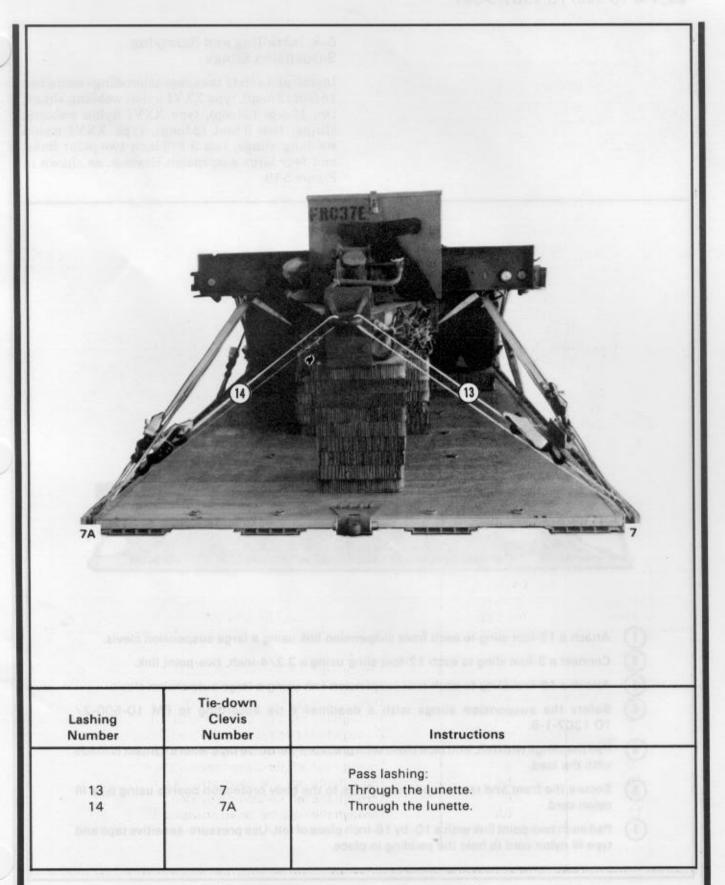
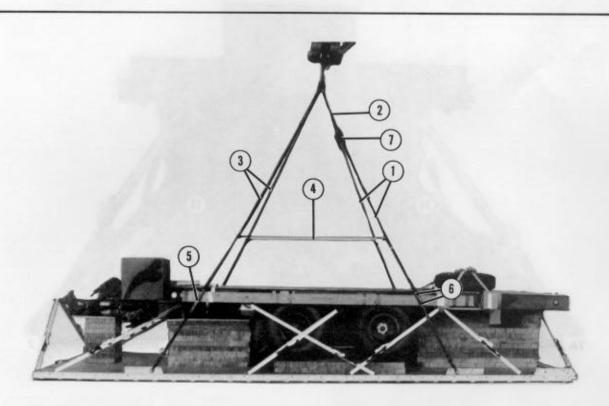


Figure 5-18. Lashings 13 and 14 installed

5-8. Installing and Safetying Suspension Slings

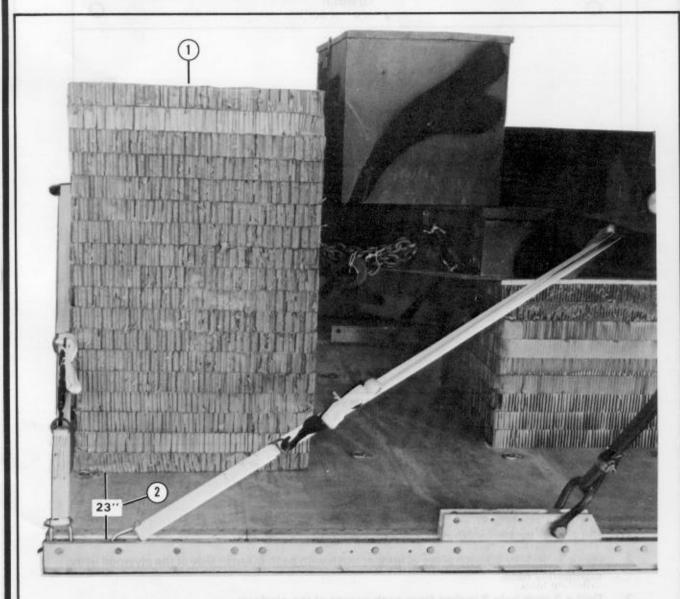
Install and safety the suspension slings using two 16-foot (2-loop), type XXVI nylon webbing slings; two 12-foot (2-loop), type XXVI nylon webbing slings; two 3-foot (2-loop), type XXVI nylon webbing slings; two 3-4-inch two-point links; and four large suspension clevises, as shown in Figure 5-19.



- 1) Attach a 12-foot sling to each front suspension link using a large suspension clevis.
- (2) Connect a 3-foot sling to each 12-foot sling using a 3 3/4-inch, two-point link.
- Attach a 16-foot sling to each rear suspension link using a large suspension clevis.
- Safety the suspension slings with a deadman's tie according to FM 10-500-2/ TO 13C7-1-5.
- 5 Pad the slings with felt, and tape them with pressure-sensitive tape where contact is made with the load.
- Secure the front and rear suspension slings to the body protection boards using type III nylon cord.
- Pad each two-point link with a 10- by 18-inch piece of felt. Use pressure-sensitive tape and type III nylon cord to hold the padding in place.

5-9. Building and Installing Parachute Stowage Platform

Prepare the honeycomb supports for the parachute stowage platform as shown in Figure 5-20. Build the parachute stowage platform as shown in Figure 5-21. Install the parachute stowage platform using four 15-foot tie-down assemblies as shown in Figure 5-22.

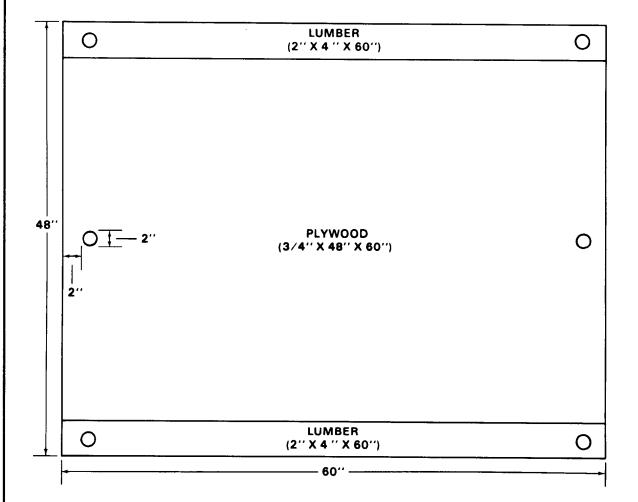


- 1) Form two honeycomb supports with eighteen 12- by 32-inch pieces of honeycomb in each support.
- Position each support flush with the rear edge of the platform and 23 inches from each side rail.

Figure 5-20. Honeycomb supports prepared

Notes:

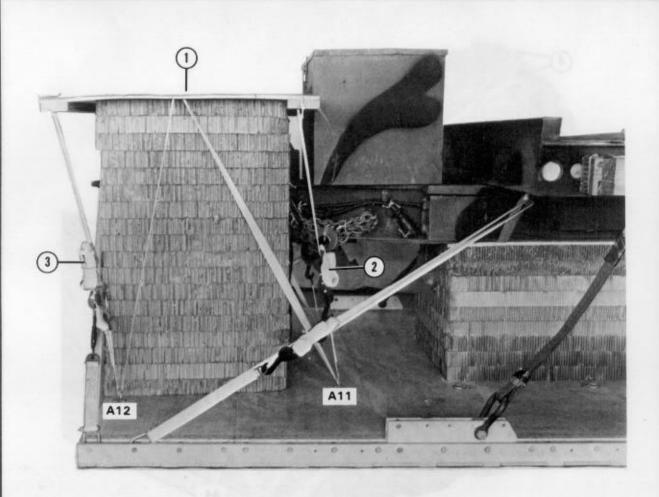
- 1. This drawing is not drawn to scale.
- 2. Dimensions are given in inches.



Step:

- 1. Cut a 3/4- by 48- by 60-inch piece of plywood.
- 2. Nail a 2- by 4- by 60-inch piece of lumber flush with each 60-inch side of the plywood using eightpenny nails.
- 3. Drill a 2-inch hole 2 inches from each corner of the platform.
- 4. Drill a 2-inch hole 2 inches from the side and at the center of each 48-inch side of the platform.

Figure 5-21. Parachute stowage platform built



- Place the parachute stowage platform on the honeycomb supports with the 2- by 4- by 60-inch pieces of lumber facing down and parallel to the front of the load.
- 2 Run the free end of a 15-foot lashing through the front and center holes of the parachute stowage platform and through tie-down ring A11. Secure the lashing with a D-ring and a load binder. Repeat the procedure for tie-down ring B11.
- Run the free end of a 15-foot lashing through the center and rear holes of the parachute stowage platform and through tie-down ring A12. Secure the lashing with a D-ring and a load binder. Repeat the procedure for tie-down ring D12.

Figure 5-22. Parachute stowage platform installed

5-10. Stowing and Securing Cargo Parachutes

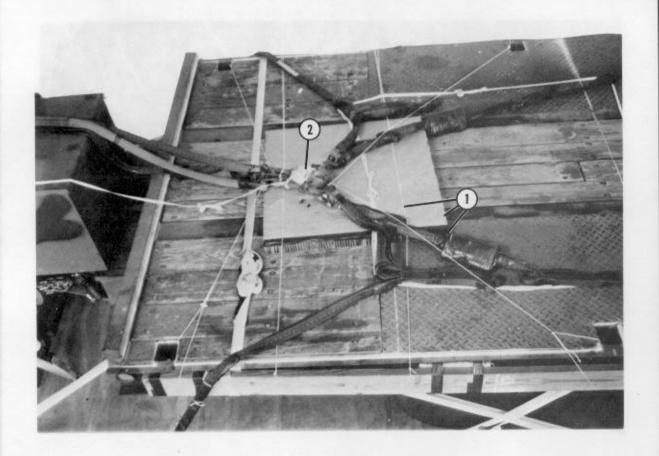
Prepare, stow, and secure three G-11B cargo parachutes according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 5-23.



- (1) Cluster three G-11B cargo parachutes according to FM 10-500-2/TO 13C7-1-5.
- Install the first parachute restraint strap to bushings 44 and 44A according to FM 10-500-2/ TO 13C7-1-5.
- Install the second parachute restraint strap to clevises 6 and 6A according to FM 10-500-2/ TO 13C7-1-5.
- Install two parachute release straps to the parachute restraint straps according to FM 10-500-2/TO 13C7-1-5.

5-11. Installing Parachute Release

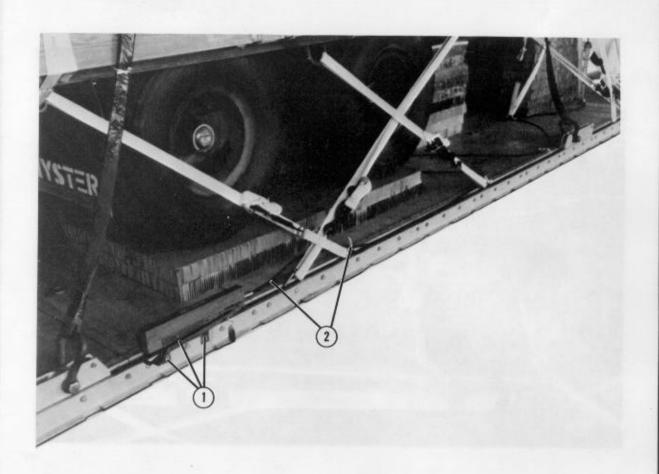
Prepare, install, and safety an M-1 cargo parachute release according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 5-24.



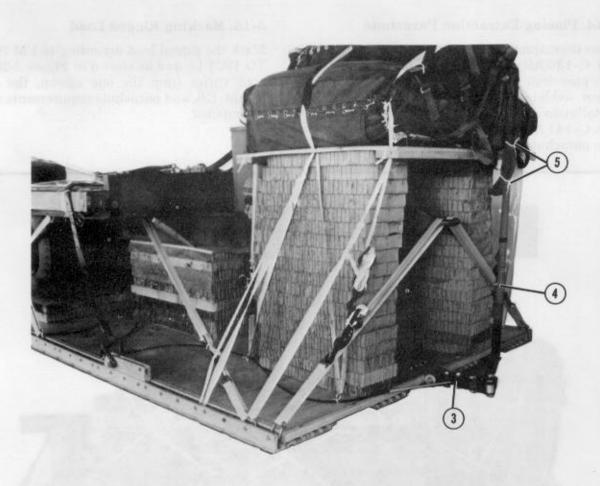
- Position one 36- by 36-inch piece of honeycomb 24 inches from the front of the bed on top of the trailer. Tape the outside edges of the honeycomb, and secure the honeycomb in place using type III nylon cord.
- Place the M-1 release on top of the honeycomb. Prepare and safety the M-1 release according to FM 10-500-2/13C7-1-5.

5-12. Preparing and Installing Extraction System

Prepare and install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 5-25.



- Install the EFTA mounting brackets to the rear mounting holes in the left platform rail. Install the actuator to the EFTA brackets according to FM 10-500-2/TO 13C7-1-5.
- Attach a 24-foot cable to the actuator. Safety it to each clevis on the inside of the platform with type I, 1/4-inch cotton webbing.



- Install the latch assembly to the extraction bracket according to FM 10-500-2/TO 13C7-1-5, and attach the cable.
- 4) Attach a 9-foot (2-loop), type XXVI nylon webbing sling as a deployment line to the load.
- Fold the excess deployment line. Secure the folds in place with tape or type I, 1/4-inch cotton webbing.

Figure 5-25. Extraction system installed (continued)

5-13. Installing Provisions for Emergency Restraints

Install emergency restraints to the platform according to FM 10-500-2/TO 13C7-1-5.

5-14. Placing Extraction Parachute

Place the extraction parachute as described below.

a. C-130 Aircraft. Place a 22-foot cargo extraction parachute and a 60-foot (2-loop), type XXVI nylon webbing extraction line on the load for installation in the aircraft.

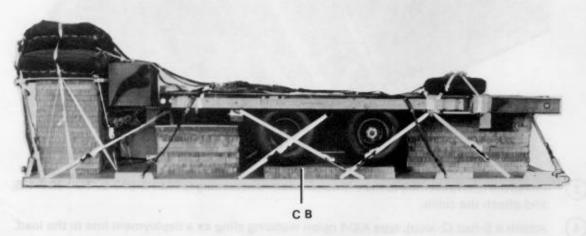
b. C-141 Aircraft. Place a 22-foot cargo extraction parachute and a 140-foot (3-loop), type XXVI

nylon webbing extraction line on the load for installation in the aircraft.

5-15. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 5-26. If the load varies from the one shown, the weight, height, CB, and parachute requirements must be recomputed.

CAUTION: Make the final rigger inspection required by FM 10-500-2/TO 13C7-1-5 before the load leaves the rigging site.



RIGGED LOAD DATA

Weight:	Load shown	12,350 pounds
-	Maximum load allowed	
Height		90 inches
Length		306 inches
Overhan	g: Rear (extraction system)	18 inches
CB (from	n front edge of platform)	146 inches
Extractio	n System	EFTC

Figure 5-26. Fifteen-ton tilt bed trailer rigged for low-velocity airdrop on the type V platform

5-16. Equipment Required

Use the equipment listed in Table 5-1 to rig this load.

Table 5-1. Equipment required for rigging the 15-ton tilt bed trailer for low-velocity airdrop on the type V platform

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
	Clevis, suspension:	
4030-00-090-5354	1-in (large)	8
4020-00-240-2146	Cord, nylon, type III, 550-lb	As require
1670-00-434-5782	Coupling, airdrop, extraction force	
	transfer w 24-ft cable	1
1670-00-360-0329	Cover, link assembly (type IV)	1
8135-00-664-6958	Cushioning material, packaging, cellulose	
	wadding	As require
8305-00-958-3685	Felt, 1/2-in thick	As require
1670-01-183-2678	Leaf, extraction line	2
1670-01-062-6313	60-ft (2-loop)	1
1670-01-107-7651	140-ft (3-loop)	1
	Link assembly:	
	Two-point:	2
5360-00-435-8994	Bolt, 1-in diam, 4-in long	(4)
5310-00-232-5165	Nut, 1-in, hexagonal	(4)
1670-00-003-1953	Plate, side, 3 3/4-in	(4)
5365-00-007-3414	Spacer, large	(2)
1670-00-783-5988	Type IV Lumber:	6
5510-00-220-6146	2- by 4- by 60-in	2
5510-00-220-6148	2- by 6- by 156-in	2
5315-00-010-4659	Nail, steel wire, common, 8d	As require
1670-00-753-3928	Pad, energy-dissipating, honeycomb,	
	3- by 36- by 96-in:	21 sheet
	6- by 12-in	(8)
	12- by 32-in	(36)
	12- by 42-in	(14)
	12- by 48-in	(8)
	18- by 18-in	(9)
	36- by 12-in	(4)
	36- by 36-in	(1)
	36- by 48-in	(5)
	36- by 72-in	(12)
	Parachute:	
4070 04 040 7044	Cargo:	3
1670-01-016-7841	G-11B	
1670 00 607 6460	Cargo extraction: 22-ft <u>or</u>	1
1670-00-687-5458	22-π <u>or</u>	1
1670-01-063-3716	ZZ-II	'

C2, FM 10-540/TO 13C7-3-381

Table 5-1. Equipment required for rigging the 15-ton tilt bed trailer for low-velocity airdrop on the type V platform (continued)

National Stock		
Number	ltem	Quantity
·	Platform, AD, type V, 24-ft:	1
	Bracket:	
1670-01-162-2375	Inside EFTA	(1)
1670-01-162-2374	Outside EFTA	(1)
1670-01-162-2372	Clevis assembly	(14)
1670-01-162-2376	Extraction bracket assembly	(1)
1670-01-247-2389 1670-01-162-2381	Suspension link	(4)
1670-01-162-2381	Tandem link	(2)
5530-00-128-4981	Plywood:	
3330-00-126-4961	3/4-in:	
	12- by 42-in	4
	12- by 48-in	2
	18- by 18-in	
1670-01-097-8816	Release, cargo parachute, M-1	1
1070 01 007 0070	Sling, cargo airdrop:	1
	For deployment line:	
1670-01-062-6304	9-ft (2-loop), type XXVI nylon webbing	1
	For lifting:	'
1670-01-062-6301	3-ft (2-loop), type XXVI nylon webbing	1
1670-01-062-6303	12-ft (2-loop), type XXVI nylon webbing	4
	For riser extension:	,
1670-01-062-6302	20-ft (2-loop), type XXVI nylon webbing	6
	For suspension slings:	
1670-01-062-6301	3-ft (2-loop), type XXVI nylon webbing	2
1670-01-062-6303	12-ft (2-loop), type XXVI nylon webbing	2
1670-01-063-7761	16-ft (2-loop), type XXVI nylon webbing	2
	Strap, parachute release:	
1670-00-040-8219	Multicut comes w 3 knives <u>or</u>	2
1670-00-998-0116	8-ft w release knife	2
0005 00 074 5404	Tape:	
8305-00-074-5124	Adhesive, 2-in	As required
7510-00-266-6710	Masking, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-ft	23
8305-00-268-2411	Webbing:	
8305-00-268-2411	Cotton, 1/4-in, type I	As required
8305-00-263-3591	Nylon, Type VIII	As required
]		
		ļ
[ļ
i l		

GLOSSARY

ACB attitude control bar

AD airdrop

AFB Air Force Base

AFR Air Force regulation

AFTO Air Force technical order

ARNG Army National Guard

attn attention

C change

CB center of balance

CFM cubic feet per minute

CG center of gravity

d penny

DA Department of the Army

DC District of Columbia

DD Department of Defense

diam diameter

EFTA extraction force transfer actuator

EFTC extraction force transfer coupling

fig figure

FM field manual

FSN federal stock number

ft foot/feet

gal gallon

hex hexagon

HQ headquarters

in inch

LAPE low-altitude parachute-extraction

LAPES low-altitude parachute-extraction system

lb pound

MD Maryland

no number

NSN national stock number

PEFTC extraction force transfer coupling

(platform)

qtr quarter

rgr requirement

SL/CS static line/connector strap

TM technical manual

TO technical order

TRADOC United States Army Training and

Doctrine Command

US United States

USAR United States Army Reserve

w with

yd yard

REFERENCES

- These documents must be available to the intended users of this publication.
 - AFR 71-4/TM 38-250. Packaging and Materials Handling: Preparing Hazardous Materials for Military Air Shipments. 15 January 1988.
- FM 10-500-2/TO 13C7-1-5. Airdrop of Supplies and Equipment: Rigging Airdrop Platforms. October 1989, Interim.
- FM 10-553/TO 13C7-18-41. Airdrop of Supplies and Equipment: Rigging Ammunition. 4 December 1981.
- TM 10-1670-208-20&P/TO 13C3-4-12.

 Organizational Maintenance Manual
 Including Repair Parts and Special Tools List
 for Platforms, Types II Modular and LAPES/
 Airdrop Modular. 10 August 1978.

- TM 10-1670-268-20&P/TO 13C7-52-22.

 Organizational Maintenance Manual With
 Repair Parts and Special Tools List: Type V
 Airdrop Platform. 1 June 1986.
- AFTO Form 22. Technical Order Publication Improvement Report. April 1973.
- DA Form 2028. Recommended Changes to Publications and Blank Forms. February 1974.
- DD Form 1387-2. Special Handling Data/ Certification. June 1986.

FM 10-540/TO 13C7-3-381

17 NOVEMBER 1978

By Order of the Secretaries of the Army and the Air Force:

BERNARD W. ROGERS General, United States Army Chief of Staff

Official:

J. C. PENNINGTON
Brigadier General, United States Army
The Adjutant General

DAVID C. JONES, General, USAF Chief of Staff

Official:

BRYCE POE II, General, USAF Commander, Air Force Logistics Command

DISTRIBUTION:

Active Army and USAR: To be distributed in accordance with DA Form 12-34B, Requirements for Airdrop of Supplies and Equipment (Qty rqr block no. 125): plus, DA Form 12-11A, Requirements for Airdrop of Supplies and Equipment in the Theater of Operations (Qty rqr block no. 95).

ARNG: To be distributed in accordance with DA Form 12-11A, Requirements for Airdrop of Supplies and Equipment in the Theater of Operations (Qty rqr block no. 95).